



## Environmental Protection Agency

### Fuel Economy Label – Phase 3 Focus Group Moderator Guide

#### Introduction (7 minutes)

- Moderator introduces herself/himself.
- [Explain:] A focus group is a group discussion where we can learn more in-depth about peoples' ideas and opinions (compared to telephone or written surveys).
- My job is to facilitate the discussion and make sure that everyone has an opportunity to speak.
- Mention observers in separate room. As you know from when we recruited you, our discussion today is being recorded. These recordings allow us to write a more complete report, and to make sure we accurately reflect your opinions.
- Housekeeping – Toilets and refreshments.
- Mention ground rules:
  - There is no right or wrong answer; we're interested in your honest and candid opinions and ideas.
  - Our discussion is totally confidential. We will not use your name or contact information in any report.
  - Please only speak one at a time, so that the recorder can pick up all your comments.
  - It is important to tell YOUR thoughts, not what you think others will think, or what you think others want to hear.
  - Please turn off cell phones
  - Your stipend will be provided as you leave.
  - Relax and enjoy

Thank you all for participating in the survey we sent to you in advance. Today we will continue the discussion talking about new car purchases and the fuel economy label that appears on all new vehicles. Any questions before we begin?

- Let's start off by getting to know a little more about each other. I'd like us to go around the room with each person answering the following questions (Listed on poster chart):
  - Your first name
  - When did you buy your last new vehicle?
  - Did you consider buying a hybrid, or clean diesel, or some other alternative fuel vehicle?
  - Do you drive more city, highway, or combined?
  - About how many miles do you drive a year?

**(THREE OF THE FOLLOWING 4 VEHICLE TECHNOLOGIES WILL BE COVERED IN EACH GROUP. THE ORDER OF PRESENTATION WILL BE ROTATED ACROSS GROUPS. TOTAL TIME SPENT ON THESE 3 TECHNOLOGIES WILL BE 75 MINUTES.)**

Moderator starts off by letting them know that the fuel economy label appears within what is called a Monroney label (show large version of this on the wall; hand out copies in actual size to each participant so they can see the size of the fuel economy label within the larger label). Moderator to regularly remind them to keep this in mind as we work through the remainder of the focus group.

Now we are going to take a look at some fuel economy label designs for 3 different types of vehicles.

### **Gasoline Engine Vehicle Label Designs (25 minutes)**

1. (Hand out the gasoline engine label work sheet #1 and the individual copies of the designs. Show them the 3 options on large boards.)
  - a. Please indicate on your worksheet which option is most understandable and which is least understandable. For each choice write brief bullet points explaining why.
  - b. (Then show two versions of each of the 3 label designs, each pair identical in every way except that one label will be for a vehicle that is more fuel efficient.) On the same worksheet I would like you to identify the vehicle which is more fuel efficient from each label pair and what you are basing that on. (**Tally results from section 'a' above and this section** and open up to discussion). Probe on how the vehicles in each pair compare in regard to the following metrics: fuel consumption, fuel cost, and environmental impact. This probing needs to uncover any misunderstandings.
    - If costs are broken out by city/highway or just combined, draw their attention to this and probe on which they prefer.
  - c. Which of the designs would most influence you to purchase a fuel efficient vehicle? Why? Listen for and probe on any misunderstandings of metrics.
2. What top 2 pieces of information did you get from the labels? Can you suggest improvements to these label designs, not just in how they look, but also in regard to content? Probe on metrics or other information that would increase their understanding and how that would influence their choice of a fuel efficient vehicle.

Collect worksheets and ask client if they have any questions at this time.

### **Electric Vehicle Label Designs (25 minutes)**

Read the following (Handout copies and read the following statement):

*Electric Vehicles use electricity stored in batteries to propel the vehicle. The battery is charged by plugging it into an electrical outlet. This could be a standard electric outlet or a high voltage custom-installed charging station for more rapid charging. Like hybrid vehicles, some energy is recovered when the brakes are applied. The vehicle travels until the charge is depleted or it is re-charged. There is no option to run it on gasoline.*

3. (Hand out the EV label work sheet #2 and the individual copies of the designs. Show them the 3 options on large boards.)
  - a. Please indicate on your worksheet which option is most understandable and which is least understandable. For each choice write brief bullet points explaining why.
  - b. (Then show two versions of each of the 3 label designs, each pair identical in every way except that one label will be for a vehicle that is more fuel efficient.) On the same worksheet I would like you to identify the vehicle which is more fuel efficient from each label pair and what you are basing that on. (**Tally results from section 'a' above and this section** and open up to discussion). Probe on how the vehicles in each pair compare in regard to the following metrics: fuel consumption, fuel cost, and environmental impact. This probing needs to uncover any misunderstandings.
    - If costs are broken out by city/highway or just combined, draw their attention to this and probe on which they prefer.
  - c. Which of the designs would most influence you to purchase a fuel efficient vehicle? Why? Listen for and probe on any misunderstandings of metrics.
4. What top 2 pieces of information did you get from the labels? Can you suggest improvements to these label designs, not just in how they look, but also in regard to content? Probe on metrics or other information that would increase their understanding and how that would influence their choice of a fuel efficient vehicle.

Collect worksheets and ask client if they have any questions at this time.

### **Extended Range Electric Vehicle Label Designs (25 minutes)**

(Handout copies and read the following statement. Leave the conventional vehicle label and just designed EV label showing for reference.)

*An EREV has 2 modes of operation and can be plugged in to charge the battery.*

1. *It uses wall electricity to propel the vehicle (like an EV) until the wall electricity is used up.*
2. *Once the stored wall electricity is used up, it runs like a gasoline hybrid, using gasoline to propel the vehicle and some energy is recovered when the brakes are applied.*

*Important: daily driving distance can GREATLY affect amount of gasoline used. Can go all the way from zero gasoline (if shorter commutes and plenty of recharging) to entirely gasoline (if longer drives and no recharging). Validate that they understand this.*

5. (Hand out the EREV engine label work sheet #3 and the individual copies of the designs. Show them the 3 options on large boards.)
  - a. Please indicate on your worksheet which option is most understandable and which is least understandable. For each choice write brief bullet points explaining why.
  - b. (Then show two versions of each of the 3 label designs, each pair identical in every way except that one label will be for a vehicle that is more fuel efficient.) On the same worksheet I would like you to identify the vehicle which is more fuel efficient from each label pair and what you are basing that on. (**Tally results from section 'a' above and this section** and open up to discussion). Probe on how the vehicles in each pair compare in regard to the following metrics: fuel consumption, fuel cost, and environmental impact. This probing needs to uncover any misunderstandings.
    - If costs are broken out by city/highway or just combined, draw their attention to this and probe on which they prefer.
    - If fuels are broken out separately or just combined, draw their attention to this and probe on which they prefer.
  - c. Which of the designs would most influence you to purchase a fuel efficient vehicle? Why? Listen for and probe on any misunderstandings of metrics.
6. What top 2 pieces of information did you get from the labels? Can you suggest improvements to these label designs, not just in how they look, but also in regard to content? Probe on metrics or other information that would increase their understanding and how that would influence their choice of a fuel efficient vehicle.

Collect worksheets and ask client if they have any questions at this time.

### Plug-in Hybrid Electric Vehicle Label Designs (25 minutes)

(Handout copies and read the following statement).

*A PHEV has 2 modes of operation and can be plugged in to charge the battery.*

1. *It uses wall electricity intermingled with some gasoline to propel the vehicle until the wall electricity is used up.*
2. *Once the stored wall electricity is used up, it runs like a gasoline hybrid, using gasoline to propel the vehicle and some energy is recovered when the brakes are applied.*

*Important: daily driving distance can GREATLY affect amount of gasoline used. Validate that they understand this.*

7. (Hand out the PHEV label work sheet #4 and the individual copies of the designs. Show them the 3 options on large boards.)
  - a. Please indicate on your worksheet which option is most understandable and which is least understandable. For each choice write brief bullet points explaining why.

- b. (Then show two versions of each of the 3 label designs, each pair identical in every way except that one label will be for a vehicle that is more fuel efficient.) On the same worksheet I would like you to identify the vehicle which is more fuel efficient from each label pair and what you are basing that on. (**Tally results from section 'a' above and this section** and open up to discussion). Probe on how the vehicles in each pair compare in regard to the following metrics: fuel consumption, fuel cost, and environmental impact. This probing needs to uncover any misunderstandings.
  - If costs are broken out by city/highway or just combined, draw their attention to this and probe on which they prefer.
  - If fuels are broken out separately or just combined, draw their attention to this and probe on which they prefer.
- c. Which of the designs would most influence you to purchase a fuel efficient vehicle? Why? Listen for and probe on any misunderstandings of metrics.

8. What top 2 pieces of information did you get from the labels? Can you suggest improvements to these label designs, not just in how they look, but also in regard to content? Probe on metrics or other information that would increase their understanding and how that would influence their choice of a fuel efficient vehicle.

Collect worksheets and ask client if they have any questions at this time.

### Using Labels to Compare Across Technologies (14 minutes)

9. Is there a particular part of the label that would help you compare across vehicle technologies? Probe on fuel cost and fuel consumption. Is there something that would work better?

**MODERATOR: ASK GROUP WHICH LABEL DESIGN TO USE FOR THIS NEXT EXERCISE. IF NO CONSENSUS, WORK TO TEST THE TOP PICKS. THE LABEL DESIGN TYPE TO BE USED IN THE EXERCISE NEEDS TO ENSURE THAT EACH DESIGN IS USED AT LEAST ONCE (AND PREFERABLY TWICE) IN THIS EXERCISE .**

10. Show participants a label for each of the three vehicle types and pass out worksheet #5. Please indicate on your worksheet:
  - Which type of vehicle is better for a trip of 30 miles?
  - Which type of vehicle is better for a trip of 50 miles?
  - Which type of vehicle is better for a round trip of 100 miles?
  - Which type of vehicle is most environmentally friendly?

Then open up to discussion and probe on what information they used to compare and make their choices.

11. Looking across the labels you preferred for each technology, are there portions of the labels that could be removed without affecting your ability to compare within or across vehicle technologies?

- Could the design of the label be modified to assist you in making these comparisons?
- Is the information you would want to see for comparison purposes easily found on label?

12. If group has not reached a consensus on a label design that is the same for all technologies, moderator to display the choice options from the group and tell them to work to reach consensus. Probe on eventual level of agreement -- is it a fairly strong consensus vs. "I can live with that design."

Collect worksheets.

### Environmental Metrics (15 minutes)

Now we'd like to explore some ways to communicate the environmental impact of vehicles.

13. (Hand out worksheet #6) Show participants the 4 possible metrics (see below) and ask them to individually rank their preference for understanding and to briefly explain why they chose their #1 and #2 rankings. Tally results in regard to how many ranked each option as their number 1 or number 2 choices. Then open to discussion regarding reasons behind their preferences. Probe group on what the metric information meant to them to see if they understood, which one was most intuitive, does it provide enough information, and which one they would be most likely to use.

Also probe on their reaction to the following:

- Leafs and stars and 0-10 rating bars are a relative scale (comparisons to other vehicles rather than objective measure for a specific vehicle)
- Rating criteria could change each year as the fleet of vehicles improved, that is, a vehicle with a certain emissions level in one year might get 4 leafs, but the next year might only get 3 leafs if the technology did not change

(1) 2 enviro ratings which are relative --1-10 for both CO2 and Air Pollution (Label A)

(2) 1 enviro rating which is relative for CO2 (using stars) and another that is relative (using stars) for air pollution (Label B)

(3) 2 enviro ratings depicted by leafs for both CO2 and Air Pollution (Label C)

(4) A mixed approach-- leafs for air pollution but absolute number for CO2 (Label D)

14. For vehicles that run on electricity, the environmental ratings do not take into account any pollutants emitted from the power plant that generated the electricity to charge the battery. Probe on:

- How many realized that (show of hands)?
- Should that information be on the fuel economy label? (show of hands) Why or why not?
- Is the following language sufficient -- "The environmental ratings are based on tailpipe emissions." Why or why not?

Collect worksheets.

**Annual Cost and Annual Gallons Assumptions (3 minutes)**

15. Moderator to point to the "annual cost number and annual gallons" and indicate that this is **based on the average number of miles driven by a U.S. consumer the first year they own their new vehicle**. Get their reaction to this.

Then ask if EPA **instead** base the annual estimate for both the annual gallons of gasoline used and the cost **on the average annual miles driven by all US drivers** (which is closer to 12,000). Get reaction to this. Probe on why or why not?

**Monroney Label Placement (3 minutes)**

16. Show 3 versions of Monroney label with the EPA fuel economy label in different locations. Ask for show of hands as to which version they would find:

- Most useful and why?
- Most appealing and why?

(Probe on left-handed and right-handed person issue.)

17. What do you think about the size of the fuel economy label? (Listen for and probe on whether it needs to be bigger and why or why not.)

**Wrap-Up (3 minutes)**

18. Is there information that we have not discussed today that would influence you to choose a fuel efficient vehicle?
19. Anything else you would like our clients to know about your thoughts about fuel economy labels?

Ask client if they have any last questions.